Statement of Purpose

The art of predicting future outcomes based on historical data and trends is a topic that has always fascinated me. Data analytics is in use everywhere now, whether it’s for predicting buyer preferences on online shopping sites or for influencing political victories and business decision-making. On a mundane level, even as a huge cricket fan, I am highly intrigued by the statistical determinations used by experts to decide on critical situations in a match, like how to form a strategy and trap a batsman, what should be the field placement against a particular batsman, and many more. The utility of data science and analytics, as well as their broad scope for practical application in all areas of industry and technology, have made it my ideal choice for further studies and a career.

"The secret of change is to focus all of your energy not on fighting the old, but on building the new." Taken from Dan Millman’s fictionalized memoir, "Way of the Peaceful Warrior," the quote reflects on the ability to change, to pursue your true passion, regardless of how far you’ve gotten in a different direction. I truly resonate with it as I received my bachelor's degree in computer science and engineering, The holistic curriculum that included courses such as engineering mathematics, probability and stochastic processes, computer programming using C and Java, Python data structures and algorithms, computer networks, digital image processing, and operating systems, I believe these courses will prove extremely useful as I further my education in Data Analytics. During my graduation, I signed up for a skill development program in data science using Python and R programming to bridge my knowledge gaps.

Though I indulged in numerous academic and extracurricular projects that hosted the possibility of inculcating programming, one of the better projects I have done is working on a solar electric vehicle that employed me for months, and through the project, I was able to implement my knowledge of my course along with the usage of data science in determining the range of the vehicle using optimal load on the motor ,amount of current passing through the battery and a few other attributes. We made a web application which was built using the PHP language with SQL as a backend database, through which we can download the excel sheet which contains data values of all the fields/attributes inputted in the web application. We are doing analysis on this data sheet using R language and have obtained statistical results and graphs. This provides an efficient way of showcasing how important attributes like vehicle speed, motor rpm, weight of passengers and roll cage affect the energy consumption from the battery.

Additionally, when I started to work on this project, I commenced with limited knowledge of programming, but as I advanced to later stages, I made use of the tools that the internet has to offer and equipped myself with different ways to solve the problems that arose. Due to my affinity for the world of advancing technology, I have also conducted various technical summits and participated in various paper presentations (AR/VR, Cryptocurrency, Financial Markets, Electric Vehicles). In addition, I was a member of the college cricket team and the entrepreneurship club. I have always been a giver, and thus, I have been involved in blood donation and dog adoption initiatives.

As part of my internship, I interned at Capgemini Hyderabad, a company that focused on technology services and digital transformation. I worked on various automation projects that employed high-level data processing and Internet of Things applications, and through these endeavors I inclined more towards data analytics. Later, when I worked for Brillio, the opportunities for advancement were limitless, with a varied range of tasks to do. I oversaw projects that included a variety of apps ranging from Core Java, JSP, Angular Web applications, Spring MVC, testing tools like JUnit, Mockito, Jasmine, and running Java Spring Boot on a Virtual Windows Server to automating shell scripts on Unix Servers. I also built Java code to automate a procedure that parses code sections from thousands of generated case notes and writes them into a plain-text file for cross-verification with an INI file, which proved to be useful to clients. Through all these jobs and internships, I have met a lot of smart people and have realized my strengths and weaknesses.

While considering the best way to advance my career, it became clear that furthering my education was the only way to go. My longstanding interest in data analysis was sparked at this point, and I decided to pursue an MS in data analytics. I think that taking this course will be the best match with my future objectives and enables me to make more strategic decisions since it has the potential to help me develop the knowledge and skills necessary for planning, implementing, and turning data sets into useful information. The curriculum covers data mining, machine learning techniques, and data visualization, which are in line with the present market. Thus, to sharpen my acumen in the field of data science, I intend to apply for a master’s in the **Data Analytics** Programme at **University of Maryland, Baltimore County**. I also think that the university would help me bridge the crucial gap between my academic endeavors and my professional pursuits. All the opportunities at the campus of the university, like collaborating with a multitude of industries, working with peers on different projects, and conducting research under accomplished professors, would also help me get more comprehensive exposure to real-life problems and give me a chance to work on them.

The award-winning university's commitment to providing a stimulating and vast experience for its aspirants is evident in the course structure designed to equip students with the knowledge, skills, and expertise needed to research, create, and work with the best minds in the field. After going through the courses and academic structure multiple times, I think I will be able to put myself under the tutelage of the faculty of **UMBC** for the immense knowledge that they possess. Later, I would have a SaaS start-up that aims at making people's lives simpler and better. I believe my inquisitiveness and exuberance in the field will keep pushing me to strive for more. Over the years, my self-motivated nature has helped me take various initiatives which have shaped me into the person I am today. Displaying a commitment to learning, taking on demanding roles and responsibilities, respecting the values needed to succeed, and working hard to foster them are a few of the capabilities that I believe deem me worthy of securing a place in the program. I believe I have aptly expressed my interests in the field of study, and I hope that the admissions committee recognizes the same. I now thank the admission committee for giving me a chance to submit my statement and hope for a positive response.